

AMENDMENT UNDER 37 C.F.R. § 1.111
U.S. Appln. No. 09/863,321

REMARKS

Applicant thanks the Examiner for acknowledging acceptance of the drawings.

Applicant thanks the Examiner for acknowledging his claim to priority under 35 U.S.C. § 119, and receipt of a certified copy of the priority document.

Claims 1-10 have been examined on their merits, and are all the claims pending in the application.

1. Claims 9 and 10 stand rejected under 35 U.S.C. §102(e) as allegedly being anticipated by Martin et al. (EP 0874488 A2).

Martin is published by the European Patent Office on October 28, 1998, and should be a 102(a) reference.

The Examiner has asserted that Martin teaches packing a received frame, including the unchanged overhead sections thereof, as payload in the concatenation of the newly formed multiplex units. Applicant respectfully disagrees.

As shown in Fig. 1 of Martin, a SONET frame has a transport overhead (TOH), and a synchronous payload envelope (SPE). The TOH includes a section overhead field (SOH) and a line overhead field (LOH).

Fig. 6 of Martin illustrates carrying four OC48 trib systems over an OC-192 from an input transparent multiplexer/demultiplexer (TMux) 40 to an output TMux 50. As shown, each of trib input ports 61-64 receives an incoming SONET formatted optical signal OC48 #14 over a

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respective input span 51, 53, 55 and 57 and converts it to an input STS-48 #14. A trib TOH processor 60 receives the SOH and LOH bytes of all input STS-48s and processes these bytes, passing through some of them and terminating the others. A transmit supercarrier TOH processor (SC TOHP) 66 generates a TMux message (TMux Msg) comprising four bytes, one to indicate the bit error rate of each input span. The SC TOHP 66 also passes the trib TOH bytes from the trib TOH processor 60 and aligns each byte into the correct timeslot. An STS-1 manager 65 routes the 4x48 component STS-1s received from the trib input ports 51, 53, 55 and 57 to an SC output port 71. The SC output port 71 receives the output STS-1s from the STS-1 manager 65 and the SC TOH from SC TOHP 66, multiplexes the STS-1s into the supercarrier STS-192, and adds the SC TOH.

As the Examiner has stated, in Martin, the SC TOHP processor 66 creates the SC TOH from the supercarrier STS-192 from the signals received from the trib TOH. In other words, Martin's trib TOH is used to create the TOH of the supercarrier. However, in the invention of claim 9, the overhead section of the received frame is packed as payload of the multiplex units, not the overhead.

Accordingly, Applicant respectfully submits that claims 9 and 10 are patentable.

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2. Claims 1 and 3 stand rejected under 35 U.S.C. 102(e) as allegedly being anticipated by Russell et al. (EP 0993135 A2).

Russell is published by the European Patent Office on April 12, 2000, and should be a 102(a) reference.

Russell discloses a method of transmitting OSI layer 2 datacoms data by direct incorporation into a plurality of synchronous digital hierarchy virtual containers. As shown in Fig. 5 of Russell, OSI layer 2 datacoms carried IP packets are incorporated into SDH virtual containers in SDH protocol layer 502. As shown in Fig. 6 of Russell, a rate adaptation means 601 adapts between OSI layer 2 datacoms rates and SDH rates equivalent to the rates of the virtual containers. Thus, what is transmitted in the Russell concatenation of multiplex units is OSI layer 2 datacoms data, or IP packets, not the recited frame of frame-structured synchronous multiplex signal to be transmitted.

Accordingly, Applicant respectfully submits that claims 1 and 3 are patentable.

3. Claims 5-8 stand rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over Russell. As discussed above, Russell fails to teach or suggest at least transmitting a frame of frame-structured synchronous multiplex signal as payload in a concatenation of multiplex units. Thus, Applicant respectfully submits that claims 5-8 are patentable.


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4. Claims 2 and 4 are objected to as being dependent upon a rejected base claim, and would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Because claim 1 is patentable, claims 2 and 4 are patentable at least by virtue of their dependency from claim 1.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,


Paul J. Wilson
Registration No. 45,879

SUGHRUE MION, PLLC
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

WASHINGTON OFFICE

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